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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,186	10/30/2001	Nelson Liang An Chang	100111624-1	9433

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EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
2671	3

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/021,186	CHANG, NELSON LIANG AN
	<b>Examiner</b>	<b>Art Unit</b>
	Scott Wallace	2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,6,8,9,13,15,16,18 and 22 is/are rejected.
- 7) Claim(s) 3-5, 7, 10-12, 14, 19-21, 23 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 2 07/29/03.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 6, 8-9, 13,15-16, 18, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smartt, U.S. Patent No. 5,963,956 in view of Scott et al., U.S. Patent No. 6,545,687.

1. As per claims 1 and 8, Smartt discloses a method for distributing representative images of a group of objects in a database for display within an area bounded by a plurality of partitions within a three-dimensional graphical environment comprising (abstract and column 12 lines 50-65): determining image weight factors based on scaled dimensions (abstract); determining partition weight factors based on an associated display dimension of each partition (abstract); distributing images to successive partitions dependent on the comparison of at least one image weight factor to each partition weight factor (abstract). However, Smartt does not specifically disclose scaling an image to obtain a scaled dimension for each image while maintaining its original aspect ratio. This is disclosed in Scott et al in column 11 lines 33-44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the aspect ration when scaling with the system of Smartt because this overcomes the technological problems associated with scaling image up and down at adequate speed.

2. As per claims 2 and 9, Smartt does discloses wherein the associated display dimension is partition width (fig 14). However, Smartt does not disclose wherein the scaled dimension is image width. This is disclosed in Scott et al in column 11 lines 33-44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to scale the image width because the tile is scaled by the width therefore an associated image would have to also be scaled by the width to in the tile.

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3. As per claims 6 and 13, Smartt discloses wherein the partitions are not necessarily contiguous (fig 14).
4. As per claim 15, Smartt discloses a method of displaying representative images of a plurality of data objects in a database within a three-dimensional graphical environment (column 2 lines 4-18) comprising: partitioning the environment by representing a database of objects with a hierarchical tree including object nodes derived from object metadata and recursively partitioning the environment into a plurality of areas bounded by partitions such that the areas are proportional to object node weights (column 2 lines 4-18); distributing groups of representative images within each of the plurality of areas (column 2 lines 4-18); determining partition weight factors based on an associated display dimension of each partition (column 2 lines 4-18). However, Smartt does not disclose scaling images to obtain a scaled dimension for each image in the group while maintaining its original aspect ratio; determining image weight factors for the group of images based on scaled dimensions; distributing the group of images to successive partitions dependent on the comparison of at least one image weight factor to each partition weight factor. This is disclosed in Scott et al in column 11 lines 20-55. It would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the aspect ration when scaling with the system of Smartt because this overcomes the technological problems associated with scaling image up and down at adequate speed.
5. As per claim 16, Smartt discloses wherein representative images are grouped according to the hierarchical tree (column 2 lines 4-18).
6. As per claim 18, Smartt does discloses wherein the associated display dimension is partition width (fig 14). However, Smartt does not disclose wherein the scaled dimension is image width. This is disclosed in Scott et al in column 11 lines 33-44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to scale the image width because the tile is scaled by the width therefore an associated image would have to also be scaled by the width to in the tile.
7. As per claim 22, Smartt discloses wherein the partitions are not necessarily contiguous (fig 14).

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***Allowable Subject Matter***

8. Claims 3-5, 7, 10-12, 14, 17, 19-21, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Wallace whose telephone number is 703-605-5163. The examiner can normally be reached on Monday thru Friday from 8:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on 703-305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MARK ZIMMERMAN  
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